That caused us to put out this book, *Dredging Is for the Birds*. Later, years later, I wrote a letter and advised the head of the Audubon Society that if he would describe the habitat needed for certain endangered species, the Corps could build them.

As mentioned, NEPA contained no grandfather clause, and we were in violation of the law as soon as it was passed. I ultimately set up a group of congressional briefings. Lieutenant Colonel John Wall, who had been with me in Vietnam, prepared the briefings on where we stood in implementing NEPA and spoke to various sections of the Congress.

We especially needed to explain why we had not implemented NEPA in the operational field, particularly in the dredging field. We were getting to it, but the priorities addressed new work first, then ongoing construction, et cetera, and O&M [operation and maintenance] last. I also explained to the EPA that they could stop dredging, but our plan was to have all in order in a couple of years, and showed them our time schedule. As a consequence of these efforts, we didn't have to stop anything in the operational field.

That was, I think, an initiative which saved the taxpayer and us a lot of money. Because of this dredging issue, Bill Murden and I spent a couple of days on a Corps hopper dredge in Portland so I could better understand the business. I began to realize that dredging was an expensive operation and that probably the Corps should turn over to private industry the hopper dredge business. It took a little while to ferment this idea, but privatization was finalized during my term as Chief.

- O: Lock and Dam 26 was another important issue with environmental implications.
- A: We had been repairing and upgrading the locks and dams on the Ohio River under Section 109 of the Water Resource Act of 1919, which gave the Chief of Engineers *authority* [not financing] to maintain, repair, and rehabilitate existing locks and dams up to current traffic without further congressional approval. The word "current" may not be the precise word in the legislation. The interpretation in the Chief's office for years had been that "current" meant today's traffic, not the traffic when originally authorized. As a consequence of that, we'd upgraded practically all of the Ohio River locks to actual 1970 traffic levels.

Lock and Dam 26 came along. General Charles "Chuck" Noble was the division engineer in the Lower Mississippi Valley Division. This was early in the process. He called me up one day in early 1973 and said that he was going to issue a request for proposals on a new Lock and Dam 26. I remember distinctly asking him if he had an environmental impact statement. He said, "Well, we don't need one. There's no opposition, there's no environmental problem here."

I don't remember the dates exactly, but before he ever got around to a contract, we were challenged. The challenge was that we were going to build a lock and dam to increase the traffic from the original design to meet 1972 traffic requirements.

Well, when we looked at this law and really got into it, Joe Tofani said, "I've known for a long time that we were on shaky ground with that law, but now that they've called our hand, we might as well accept the fact that we're not doing this right and back up and regroup."

The Water Resources Congress, a rather powerful organization, called a meeting at the Coal Building in D.C. to discuss Lock and Dam 26. Their thrust was to harness their political power to either redefine the original language or to pass an amendment to relieve Lock and Dam 26. Of course, the fact of life is there was no point in spending millions of dollars to meet original traffic by rebuilding a 100-by-600-foot lock. So the objective never changed, but how to reach it became the issue.

When asked what I expected the Corps to do, I advised them that the Corps' position was to go the whole ten yards including authorization, which meant a complete evaluation of the impact of this increased traffic on the environment of the upper Mississippi, et cetera. Reauthorization would take four or five years. That didn't seem to be a very attractive idea, but on the other hand, I felt that was the only course open to the government. I went to the groundbreaking as Chief of Engineers five years later.

Interestingly enough, preparing the Lock and Dam 26 authorization language presented a couple of wrinkles worth mentioning. The first lock [110 by 1,200 feet] was adequate for 1976 traffic. The second lock was not needed for the current [1976] traffic but would be needed to meet projected growth. It was impossible to authorize the second lock until the full analysis had been made of the effect of added barge traffic on the upper Mississippi environment.

The environmental impact on the upper Mississippi of the increased traffic which would result from the second lock presented a difficult problem. The upper Mississippi is changing naturally all the time and will continue to do so for many years. The basic problem was to measure the impact of added traffic when there was no clear, stable baseline.

The study of this was put under the umbrella of the Upper Mississippi River Commission. Ultimately the effect of increased traffic which a second lock would allow on the upper Mississippi was reasonably well defined and found insignificant, and the project went ahead.

That was a landmark case because from then on all the other locks and dams that we've modernized were done differently.

Lock and Dam 26 and also Tennessee-Tombigbee were two jobs that followed me through my moves in OCE.

Another issue related to Lock and Dam 26 is still out there, and that is how to handle recreational vessels. The impact of the recreational vessels on commercial traffic has become significant since we originally opened these waterways. We should build separate locks for recreational vessels. The standard commercial lock is not designed to handle smaller boats, and while it would have been expensive, we had a chance to build small-boat locks as part of the Lock and Dam 26 structure. In fact, an early plan provided a passage for recreational boats that would not interfere with the commercial traffic.

I got on to this idea as a member of PIANC, which is the Permanent International Association of Navigation Congresses. On the Rhine-Main-Danube Canal a lot of study went into the use of separate locks for recreational vessels.

- O: How did you get involved with PIANC and other international activities?
- A: Navigation basically was a first love of mine in the civil works arena, and because of that, I became involved with PIANC in 1959, with the National Waterways Foundation later in life, with Harry Cook's waterway conference, and actually was called upon by the government of the United States to get involved in two international navigation projects. After the 1973 war, the Corps was asked to advise the chairman of the Suez Canal Authority, MrMashour Ahmed Mashour. Bill Murden, Colonel Vincent Rathbum, Homer Willis, and I made up our four-man team. Our job was to advise on how to put it back in operation and to improve its efficiency after many years of inactivity.

That was a very interesting challenge. I made four trips over the years to the Suez Canal. The Suez Canal Authority was very professional and did a magnificent job getting back in operation. I'm not talking about removing the ordnance. The Corps of Engineers had very

little to do with that. I'm talking about deepening, fixing the bypasses, and installing the communications and navigation control facilities.

Ours was a good team which did valuable work for Egypt and for U.S. business. We were there when President Nixon resigned. The reason I remember that is because he made the headlines, and our little group was mentioned elsewhere in the same Cairo newspaper.

Then I was sent to Russia twice-once as part of PIANC and later in conjunction with a program dealing with housing and other construction. HUD [Housing and Urban Development] took the housing and the Corps took other construction. The other construction was a much bigger piece of the pie than just the housing because it included all the dams, waterways, power, and everything else.

- Q: While you were director of Civil Works, didn't the Corps begin to think more seriously about nonstructural solutions to water resources problems?
- A: Yes, the accumulated effect of the absence of support for new dams, the problems of Lock and Dam 26, the incessant oversight by the environmental communities all led to a belief that if we are not going to be allowed to solve problems by building something, maybe we can solve them some other way.

It turned out that there was an authorized project in Littleton, Colorado, to build a floodway



General Morris with the head of the Suez Canal Authority, Mr. Mashour Ahmed Mashour, in the summer of 1974. The canal is in the background.

downstream from Chatfield Dam through that community. The citizens objected and asked for the money to buy the land, move houses out if necessary, and leave it alone. Well, that didn't sound like a bad idea. Economically it didn't look too bad either, after we checked it out.

Our problem was an absence of any authority not to build something. The congressman from Littleton, Colorado, at that time was Bill Brotsman. Obviously we needed some special legislation in the case of the Littleton project to allow the Corps of Engineers to use the money which was otherwise appropriated for a floodway to solve the flood problem with a nonstructural solution by buying land, et cetera, et cetera. I don't remember the exact wording, but that was the thrust of it. That worked out fine. People in Littleton were happy.

Later on, Section 22 in the next Water Resource Development Act authorized the Chief of Engineers to consider nonstructural solutions to floods and other water resource problems. That was a landmark event and Mr. Brotsman's assistance was crucial. Later, he became Assistant Secretary of the Army for Personnel at the same time that Veysey became Assistant Secretary of the Army for Civil Works. Well, nonstructural solutions were neither understood nor popular in the Corps initially because our people had grown up building things. Actually, we did accomplish several major water resource improvements with nonstructural solutions: Charles River in Boston; Indian Bend Wash in Scottsdale, Arizona; Prairie du Chien Wisconsin; and others. The philosophy of nonstructural solutions worked, and I think as much as anything else, it did give us a platform to approach the public with an alternative to constructing a dam. Nonstructural solutions grew out of the broader issue of environmental concern. The urban studies mentioned earlier were an example.

Another example of the emerging influence of environmental concern was the Cross-Florida Barge Canal-a landmark case in which the Corps was involved. There were two separate



Genera/ Morris gave an address at the opening ceremony of the Permanent International Association of Navigation Congresses (PIANC) in Leningrad, U.S.S.R., on 5 September 1977.

environmentally sensitive projects simultaneously in the public arena. One was the Alaska Pipeline and the other was the Cross-Florida Barge Canal. General Clarke had positioned the Corps very well to do the Alaska Pipeline project. In fact, he and I flew up there in early 1973 to **recon** the route of the pipeline with the understanding that the Corps was going to oversee the construction.

At that time, Dr. Pecora of the Department of the Interior felt the Corps should do it. He died, and President Nixon replaced him with a Mr. Whittaker of the White House. Two things happened rather quickly after that. The president stopped the Cross-Florida Barge Canal, and Alyeska, a nongovernment agency, was organized to oversee the construction of the Alaska Pipeline. I don't know whether the Cross-Florida Barge Canal was sacrificed so that the Alaska Pipeline could proceed or what, but at any rate that's what happened.

Along the way of stopping the Cross-Florida Barge Canal, the president did something which led to an important Supreme Court decision. The Congress had authorized this project and appropriated money for the Executive Branch to build it. The president had unilaterally decided not to build it and impounded the money. In the final analysis, the court ruled that the president of the United States does not have the authority to impound the money without first notifying the Congress, thus making the money available for use elsewhere. In other words, as executive, he couldn't turn his back on the instructions of the legislature. That was an important decision. Even so, the Cross-Florida Barge Canal was dropped for the wrong reasons—I believe. The publicity said it would ruin the fresh water aquifer. It would not.

Emotion in Florida was high. Martin Heuvelmans from Florida wrote a book [The River Killers] about the Corps of Engineers. He said that the Corps of Engineers had ruined Florida, that we drained all the rivers, and we had controlled the flows in such a way that the wildlife was perishing and the land was going to pot, so to speak. Heuvelmans was brought to New York to appear on the *Today Show* about his book. He gave the Corps a bad time.

I was asked to come the next day and give the Corps' side of the story. I did that. My first appearance on national television, and I would just as soon it had been the last. I spent 10, 12 minutes live on the *Today Show*, countering Mr. Heuvelmans' comments in this book. I was interviewed by Frank McGee, who happened to be from Oklahoma, and he was very gentlemanly.

Heuvelmans had some points, however, that could not be ignored, particularly in the Kissimmee area-since we're now putting it back more or less like it was originally. As I recall, the root cause of it was a state program which the Corps inherited and finished. Even so, it doesn't mean two wrongs make a right.

The Cross-Florida Barge Canal, in my judgment, should have been built. Hopefully someday it will be. The environmental issues are delicate, but they are manageable, and the transportation aspects would be very valuable. The old saw about the only reason we were going to build it was to avoid submarines during World War II is not the basic point, it's just a matter of good transportation.

The whole scenario, though, of Lock and Dam 26, the Ohio River, and the Cross-Florida Barge Canal, et cetera did raise a question in my mind as to what was the proper water transportation system for our country. So we undertook, with congressional approval, a study to answer the question, "What would a national water transportation system look like?" I envisioned a map similar to the national interstate highway system to identify each element--extensions, deletions, and the description of the normal size and shape of waterway channels, locks, et cetera.

My hope was that Congress would then authorize the navigation plan as a single objective, therefore, when the Corps added an included segment, Congress would only have to refer to the approved plan and wouldn't have to go through the laborious process of justifying each addition as if it were a separate project to carry its own weight.

That study was finished after I became Chief and will be discussed further later.

- Q: What about dam safety?
- A: We'd had some dam failures throughout the country, not federal projects, but state and private. A piece of legislation was passed while I was director of Civil Works-the dam safety inspection program. Senator [John] Stennis called up one day, wondering how much money it would take. I told him I was reluctant to give him a number but finally figured there were probably 30,000 dams out there that we'd have to inspect at about \$3,000 a dam or something like \$100 million.

I came up with \$100 million but asked that the 30,000 dams be mentioned as well. I didn't know how many dams there were, and I didn't even know how much they were going to cost per dam, but at least we had the equation. The dam safety inspection program was established and estimated costs identified. Money was not appropriated, so we didn't do anything at that time. One of the first things that happened after I became Chief of Engineers was the implementation of that bill.

- O: Tell me about the Corps' participation in the Bicentennial.
- A: We began to celebrate in 1975, so we put this together starting back about 1974. The Army had criteria for military activities, but what was the Corps of Engineers going to do for its public works role? I asked General Gribble at that time if it would be all right if we had only one primary activity, and that I would like to spend \$1 million on it. He didn't object. The Congress authorized us to spend up to \$1 million of otherwise appropriated funds for the Bicentennial. The plan was that the historical role of Congress in the public works program would be identified.

Lieutenant Colonel Bob Benning was working for me at the time, and I gave him this task. Bob was an outstanding visionary who could get a job done. He had been in Kansas City District. He suggested he not be burdened with a committee. We decided to look at the old *Sergeant Foyd*, a work boat in the Missouri River Division. I had known the boat while there, and it was about to be junked. Major General Andy Rollins, Deputy Chief of Engineers, was anxious not to let the *Foyd* be scuttled, so we had a strong support up front and were able to get an okay to make a traveling museum using the old work boat.

Benning contracted to refurbish the *Foyd*; put a barge in the front of it; paint everything red, white, and blue; and install a six-speaker, six-screen visual setup to give the history of the Corps, its nation building and water resource development roles. It became a traveling theater. A barge platform in front was used for local entertainment. This exhibit went many thousands of miles through the Mississippi, its tributaries, and the Gulf. Several million Americans visited the *Foyd*. It was very good. Benning deserves a lot of credit. A song was prepared, "Let Us Try," an environmentally sensitive song. We put a calliope on the boat to play this song along the river either as a waltz, in a Dixieland style, or as a march. People would gather at the dock and it was just-it was a good piece of work.

The Corps won the Silver Anvil for the effort. The Silver Anvil is a national award for public relations. Competition included Gulf Oil, Ford Motor Company, General Electric, other big companies, even the *National Geographic*. Naturally, we were very pleased to be chosen in our class.

When we moved to the Pulaski Building, we relocated the exhibits of the *Floyd* into the visitors center in the new Chief's office. That visitors center has been replaced.

The Bicentennial program was a highlight event during my tour as director of Civil Works.

- Q: In addition to Hurricane Agnes, were there other national emergencies while you were in Civil Works?
- A: Agnes was only the beginning-we didn't escape having other national emergencies. The year after Agnes [1973], the Mississippi River suffered a serious flood. General Noble had his hands full as the Ohio flooded, along with the upper Mississippi and the Missouri, and New Orleans was in some serious trouble. There had not been a flood on the Mississippi River for 2 1 years, and the historical average was every seven years. So we had one in 1973 and another flood the following year. The two in a row brought the average back down to about seven years.

In the process, the old river structure proved to have very serious structural difficulty. We realized it had to be repaired and possibly replaced. Planning began and proceeded until now there is a new auxiliary structure. That flooding reemphasized that the Atchafalaya is probably the most environmentally sensitive region of this country.



The Corps of Engineers vessel, Sergeant Floyd, sailed the inland waterways to celebrate the Bicentennial in 1975.

- Q: I would like to ask a follow-up question on the Section 404 program. In the court case, *Natural Resources Defense Council, Inc. v. Callaway*, the judge ordered the Corps in March 1975 to expand its definition of "navigable waters" and its Section 404 jurisdiction. Did the Corps get much guidance from the Ford Administration at the time on how to implement this court decision expanding jurisdiction?
- A: Not unless you consider the Office of Management and Budget-an office within the Executive Branch. OMB carefully coordinated the EPA's and the Corps of Engineers' programs.

We worked with EPA. As mentioned, our man was Brigadier General Ken McIntyre, then deputy director of Civil Works. He did a great job on this. We had many meetings developing draft procedures to announce in the *Federal Register*. After review by OMB and publication, General McIntyre with EPA people conducted public hearings all over the country. Rebecca Hamner represented EPA.

Ultimately, the hearings were finished, the regulations became official, and the procedures were adopted. Those procedures have held up fairly well. There've been modifications redefining the authority of both EPA and the Corps. The final "go" or "no-go" authority rests with EPA, properly so, I think. My recollection is that the efforts of the Executive Branch to implement that new law were thorough and involved many man hours over a rather long time.

So to answer your question directly, there was no strong guidance. The principal players-the Corps, EPA, and OMB, particularly the Corps and EPA-formulated this process and then went about the business of doing it. It worked.

- Q: I followed up on this because in some ways this period is pretty critical in the history of the Corps from then till **now**—
- A: Yes.
- Q: -because the environmental programs become such a big and important activity.
- A: Well, you're right. It turned out, as I may have mentioned earlier, the Corps' load of only a few thousand permits a year soon jumped to tens of thousands. The Corps showed up wherever there was development in a wetland or navigable stream.

I don't think it's a job the Corps would have gone out and asked for, frankly, but it was fortunate that the Corps got the job, in my opinion. We've taken a lot of heat over the years, but the mission clearly emerged from the Corps' role in water issues and demonstrated its ability to perform well in regulating and implementing the national objective in environmental matters.

After a few years, the environmental community preferred that the Corps keep this responsibility because it had done a good job and was fair. An alternative was to give the whole thing to EPA, and it's my recollection that the public as a whole, and the environmental community specifically, preferred the Corps to keep it.

This program gave the Corps a strong position in the growing national trend towards environmental protection, and it continues to put the Corps on the proper side of the issue.

- Q: It meant quite a few internal changes to the Corps as well, didn't it? A lot of new disciplines were brought in.
- A: Well, NEPA did that earlier. The regulatory program had a tremendous impact on and increase in the O&M manpower situation and the need to train people to do things they hadn't done before. The administration of the program became a very big challenge and subjected

the Corps and then the Executive Branch to a lot of criticism by the Congress because we weren't getting the permits approved in time. People were complaining about that. So as time went on, the authority to approve permits was re-evaluated.

There has been a lot of improvement. Since I've retired, Secretary [Bob] Page, Assistant Secretary of the Army for Civil Works, was very much involved in trying to streamline the process. That's still going on. So it goes back to the fact that there was once a rather inactive program that just exploded.

- Within the Corps it required a change in the Corps' culture too, didn't it?
- A: Yes, the regulatory program was another piece in the growth of the O&M side of the Corps, the operation and maintenance side of the house. You may recall that early on in the civil works program I had been approached by some of our senior staffers to get out of the O&M business. General Cassidy, according to Joe Tofani, is credited with saying he didn't become Chief of Engineers to be a plumber. In other words, the implication was the Corps wasn't here to do O&M work, it was here to do engineering, build things, and all that good stuff. Well, the fact is that by 1975 we had built most of the program, and early on in the 1970s the O&M program began to overtake the construction program in dollars.

So the relative position and strength of O&M in relation to planning, design, and construction was evolving, and the culture of the Corps changed accordingly. The Corps' heavyweight engineering and construction role had declined steadily while its O&M program had grown steadily. To have given up that mission would have been a serious mistake.

The regulatory program has proven the wisdom of keeping the Corps in the operation and maintenance business, because having the base on which to place the regulatory program helped the Corps survive and become active in environmental matters to include hazardous waste as well as regulatory issues. The change in the culture of the Corps started before the regulatory program; however, the regulatory program broadened its understanding and value.

Another part of the cultural change within the Corps was the privatization philosophy which reduced the Corps' operation and maintenance of certain activities the private sector could do as well and cheaper. So it wasn't only the transition from engineering, design, and construction into O&M, it was also changes within the O&M community to using contracts in place of hired labor.

Personnel shortage was one of the problems created by the regulatory program. The Corps never received the proper number of people to do the job early on; however, in all fairness, the Corps was allowed to retain spaces they otherwise would have lost without the regulatory mission.

- You supported-or you talked about the privatization initiative quite a bit too, didn't you? Another controversial **internal**—
- A: Well, it's always **controversial**—internally. I had concluded we could privatize hopper dredging if the industry would agree. We tried before, and they wouldn't do it because of the investment cost.

The idea to privatize hopper dredging had several objectives. One was to get the Corps some improved equipment. Another was to generate spaces needed elsewhere and also to pass the bulk of the maintenance of the waterways and ports over to private enterprise. Pipeline dredging had already gone through that process.

I also believe that the Corps should contract the operation and maintenance of the waterways-the locks and dams. Also, there's no reason why the Corps can't contract people to run power plants.

- O: The Corps was still using government employees for a long time to lay mat on the Mississippi, wasn't it?
- A: Well, they did as long as I was there. That was one of the things we did consider carefully, but because the work was so specialized, private industry was not yet ready to do it by contract. So the best thing was keep it.

Back in the 1930s and earlier, even earlier, there was limited or no capability in the civilian community to accomplish many of the tasks needed to execute the Corps' programs, so the Corps did it with its people and with hired labor. As the nation's private capabilities reached adequate levels in various fields, including construction and engineering, the federal government moved aside. Well, mat laying on the Mississippi was one of those areas in which the civilian industry had not quite yet gotten the capability to do it, so the Corps kept it.

There's a lot to that question. We should not privatize everything. The Corps should keep **in**-house enough requirements to maintain an engineering capability and enough construction to keep our contracting and construction management capabilities, et cetera. So there is a balance in there.

In the period from 1970 to 1980, I really do believe more things happened to change the Corps of Engineers than in any other period in recent times: The National Environmental Policy Act followed by all the regulatory regulations that came along; the change in the Corps' workload in the civil works field from new work to operations; the arrival of the Assistant Secretary of the Army for Civil Works; the impact of rebuilding the Army's physical plant to suit the all-volunteer force; the growth of American presence internationally, beginning after World War II and continuing through the 1970s in various countries; all the congressional and legal battles that went on to determine what various new laws meant to name a few. All together these involved a period of about ten years and created a tremendous amount of turbulence and change.

Your comment on the culture is absolutely on target. The Corps in the late 1980s and early 1990s became a far different organization than in 1960 when I went to Tulsa, even when I went to Omaha in 1970. You know, the old-timers speak of the "good old days" when discussing or complaining about change. There's little they can do about it, however. It's going to happen.

Now, I think the important fact about all this is the Corps has survived. It's still looked upon and respected at home and abroad as a premier source of engineering, construction, and management talent.

We're roaming around here a little bit.

Yes, but I want to roam just a little more. One thing that came to mind as we were talking-I remember seeing a quotation from General Heiberg, sort of fondly but with some frustration, I think. He referred to that "great inertia-ridden organization, the Corps of Engineers." Looking back at your career, you came out of the experience of a changing organization. Some of the leaders of the Corps made the transition, and it was a difficult transition, and some people took a lot longer. I guess what I'm saying is, "Why did you perceive the changing environment and others were slower?"

A: General Heiberg's observation is not wrong, but determined leadership based on good clear goals can move the organization. Perhaps based on my background and earlier assignments, I was able to look farther down the road to identify goals for the Corps to evaluate what was going to happen, based on trends and the warning signals of change, and then try to come up with a plan or a concept which would allow us to turn those changes to our advantage, if possible, at least to be prepared for them.

One of the things that happened during the decade of the 1970s was the various reorganization plans for the Executive Branch. We really had to do some visionary thinking to get ourselves onto a program which would allow us to walk the tightrope between not being insubordinate to the commander-in-chief and yet protecting ourselves from being demolished. That happened over and over again with the frequent reorganizations of the Executive Branch while I was director of Civil Works. One approach was to form a Department of Natural Resources as one of four super secretariats. The Corps was on the block. Later, of course, President [Jimmy] Carter had even more serious plans for the Corps.

I like trends. I don't like snapshots of where we are as much as I like to see where we have been to get here. From that background we can attempt to determine where we are or should be going.

You asked about this transition. Once NEPA was passed and became law, and because of General Clarke's leadership, I soon realized there was no need to fight the program. In fact, the Corps needed to team with and support the program and, out of it, try to adopt a strategy which would be best for our institution and, because of our belief in the institution, for the country. I think that's what we did as best we could considering that every day we plowed new ground.

The Corps could not be where it is today, in the public's mind or in its value to this country, if it had fought or tried to stay with the pre-1970 culture. So the challenge was to detect the need for change and react smartly. I don't think I've answered your question very well. For sure, numerous excellent visionary people helped; and, together, given time and some good luck, we found ways into the future which would accomplish those things.

Another related topic I need to add is training. While I was in Civil Works, as a follow-on to my experience in Omaha, I was very much concerned about the training program in the Corps. I thought there was a lot of duplication. Districts were often teaching the same subjects differently. John Bryson, who had handled personnel in Omaha, was given a special assignment to analyze the training program in the Corps. He issued his findings in a purple book, you may remember. The sum and substance of that was to set up at Huntsville a university-type training program. We eliminated duplication, saved many dollars, improved training, and accelerated the move into the environmental program requirements. Cleaning that up was, to me, a major management improvement in one specific field.

- O: Any more comments about being director of Civil Works?
- A: I was very happy in Civil Works. In many ways, it's the best job I ever had. At the time I had authorities that may not still be there. I had a staff that was outstanding, and I'm sure they still are good staffs. I had good bosses. General Clarke was truly an outstanding man, as was General Gribble. General Gribble gave us room to operate. I remember clearly, though, when General Gribble was chosen to replace General Clarke, I received a call asking me if I'd like to be on the Tennessee Valley Authority. I called my friend Don McBride, and he said, "Jack, if there's any chance you're going to move up to deputy or Chief, I'd say turn it down." I did.

The same day I had a call from a friend of mine in OMB, who said, "I hear you're going to retire."

I said, "I have no idea, no intention of retiring."

He said, "Well, that's the word out there."

Ken Ballou, Under Secretary of the Army, with whom I had worked closely on the public works business, had told General Abrams that I might be unhappy because I didn't get to be Chief. I don't know where this all started, but I was surprised by this reaction.

I was called over to General Abrams' office. Now, keep in mind I'd already had one call about the Tennessee Valley thing and another call from a guy in OMB that morning. That afternoon I went to see General Abrams, and being a very forthright person, the first thing he said to me, "Morris, I've been hearing some nice things about you. Are you planning to leave the Army?"

So I said, "Sir, this is the third time I've heard about that same subject today. If you're trying to tell me something, I'd like to hear about it," or some words to that effect.

He said, "No." Then he asked, "Where is Kerr Dam?"

"It's down here in Virginia. It's a Corps project."

"Well, I'm thinking about going down there for a couple of weeks. What do you think about



From left to right, Don McBride, former assistant to Senator Robert Kerr; Robert Kerr, Jr.; and General Morris when he was Director of Civil Works.

it?"

I mentioned that I thought that was okay, but the place was so close to Washington he couldn't get away from his business.

I suggested he ought to go to Fort Peck. He said, "Fort Peck, is that one of mine?" I said, "No, sir, it's one of mine." I explained it all to him, about being in the upper reaches of the Missouri River in Montana, that we had a good project man and horses for his daughters, et cetera. He said, "How do I get there?" "Well, if you can get to Omaha, the Corps' plane can get you to Fort Peck." So we fixed up the two bedrooms that had the baths in the lodge. Abrams stayed two weeks and had a great' time.

I'd call out every day or so and see how he was doing. Don Beckman, our project manager, was a fine man. One day as I called Bob, he told me that General Abrams had said to tell Morris to quit checking up on him.

When General Abrams came home, he had the swearing-in ceremony for General Gribble, which I attended. General Abrams said he had a wonderful time. You know, he died shortly after that because he had cancer. Sometime later I saw Mrs. Abrams at an affair in New York, and she explained that going to Fort Peck in Montana was one of the best things that ever happened to her and the family. She had no idea that the Corps of Engineers did the things they did and had such wonderful people as Beckman and his team.

I was very proud of the Corps because it made such a nice impression on the Chief of Staff and especially his family. That was quite a compliment. I always liked Fort Peck, and having the Chief of Staff up there for a couple of weeks was a good thing.

My assignment to OCE as the director of Civil Works was a crucial duty for me for several reasons. In many ways this was my most challenging and demanding job in the Corps and surely one of the most rewarding. I was blessed with excellent career experiences for the work which lay ahead and was most fortunate to serve under Lieutenant General F. J. Clarke and his successor Lieutenant General Gribble.

Most important, however, were two watershed events which occurred during the period and which forever changed the Corps and the public works program of the Department of the Army. One was from without and the other internal to the Army.

Having been passed two years prior to my arrival as director of Civil Works, NEPA and its executive agent, EPA, had found their footing. New environmental procedures impacted every aspect of the public works program. Getting the largest public works agency-the Corps-in step and a positive player in the new arrangements tested every member. Some were not willing and others not comfortable to adjust. Nevertheless, the public works foundations of the Corps of Engineers for the present and the future were laid during the first half of the 1970s decade.

The internal development was the activation of the position of the Assistant Secretary of the Army for Civil Works. The effects of this are still emerging and will continue in the years ahead. General Clarke was concerned that this position would generate fewer positive than adverse values. He appears to have had good reason for his concern. To date, the most apparent effect has been the steady intrusion of the **ASA/CW** into the fabric and authority of the position of the director of Civil Works and more seriously that of the Chief of Engineers. For the **ASA/CW** to invade the command and control arena of the responsible commander is wrong, and unfortunately such intrusions appear to be growing in number and depth.

In my view, the external **event**—NEPA-provided a new and productive challenge to the benefit of the Corps of Engineers and, in turn, to the stewardship of the nation's resources. We may have objected and even resisted the change in direction, but time has proven the new mission to be good. Conversely the position of the **ASA/CW**, which was accepted with expectations or, better stated, with hopes, tends to distract rather than foster the Corps' leadership ability to perform with greatest effectiveness. The latter is unfortunate because there is great opportunity for **ASA/CW** to assist and advance the water resources program and the Corps' role therein and to the Army.

Deputy Chief of Engineers

- O: Shall we turn to the position of Deputy Chief of Engineers, which you moved into, I think, in August 1975?
- A: Well, let's see. How did all that come about? It was June, I believe, because I was doing both jobs for a while.

Danny Raymond was the deputy, and when he decided to retire I had been in Civil Works a full three years. I was available. Of course, I think and hope General Gribble brought me into that job as deputy because he thought I would be helpful to him and the Corps. General Gribble picked General Graves to be the director of Civil Works. Graves was not available for some time, so for about 60 days I remained director of Civil Works and also the deputy.

During this same time, we had an unfortunate event occur. In June, West Point Dam was finished. The Secretary of the Army was [Howard] "Bo" Callaway, whose home was near the West Point Dam. So the dedication program highlighted a speech from Secretary of the Army Callaway.

Since General Gribble was not able to go, it fell on the deputy to accompany the secretary. We flew down, **Callaway** and a group of congressmen, and were joined at the airport by General LeTellier, the South Atlantic Division engineer, and another group of congressmen and their wives. Altogether we were about 35. We were loaded into a magnificent, brand-new bus with the elevated seats in front, a lounge area in the rear with tables with swivel chairs on each side, sofas across the back, some mirrors, closets, and a refrigerator. It was very plush and a nice way to go the 35 miles from the airport to the vicinity of the dam.

All the ladies and most of their husbands sat up front. The secretary-whose wife was in the front-and the bachelors sat in the lounge. It was a rainy afternoon. A logging truck heading in the other direction came over a hill, spun out of control, hit the bus head-on, killing both drivers. The bus skewed around, and the back end slid halfway into a ditch. Fuel was spewing to the ground, and glass and mirrors broke and flew all over the interior-a serious situation.

I was in the back with the Secretary of the Army, Congressmen [Bob] Jones, [Jack] Flynt, and [Walter] Flowers, General LeTellier, and some others. None of those in the back were hurt badly, although Congressman Jones seemed unconscious, General LeTellier had a cut on his face from flying glass, and the secretary's face had been cut. I was uninjured.

Lieutenant Colonel Freeman Cross, who was Deputy District Engineer in Savannah and had been a company commander with me in Korea, had been standing up when this happened. Once he got to his feet, he crushed open the partition between the front and the back. I went up front and found a real mess. I mean, it was bad news. People had been thrown all around, the seats had been broken loose, the driver obviously was dying if he wasn't dead. I tried to help him, but he was just smashed between the seat and steering wheel. Fortunately, the Corps

had a lead and a trailing vehicle with radios. In minutes not only the Corps but the police were there, and helicopters from Fort Benning began to arrive.

I was the senior military person. Major [Gary] Lord, a Corps officer from the office of Legislative Liaison, accompanied the congressmen. So we had **LeTellier**, Cross, Lord, and Morris from the Corps. We had the congressional group plus Secretary **Callaway** and wife.

Congressman Tom Bevill had been sitting in front with his wife, and when the impact occurred the bus door flew open. I understand he just sort of slid out underneath of the little railing in front of the first seat and outside the door. I think he had a couple of broken ribs, but he was lucky. Mrs. Bevill was shaken up but not hurt. I immediately told Cross, who was in pretty good shape, and Lord, who had a bad cut on his leg but was mobile, to have the men with their wives sit on the ground beside each other so that the wives and the husbands would go to the same place when the ambulances arrived.

Then we began to inventory the damage. Mrs. Nichols from Alabama had a seriously broken ankle. The aide men put one of those plastic air-inflated emergency splints on her. We finally got everyone out, paired up, and sitting on the side of the road in a drizzling rain, dazed. The inside of the bus was covered with debris, shoes, purses, et cetera. It looked like a war zone.

Mrs. **Callaway** while standing, talking to her husband, suddenly looked like she was going to collapse. She was laid on a stretcher and as soon as possible, onto an Army helicopter with the secretary and myself. By the time the helicopter came, everything was about as orderly as we could get it thanks to Major Lord and Colonel Cross.**LeTellier** was left behind with instructions to be sure everybody in the military got to the hospital and received a physical checkup.

Because I was in uniform and **Callaway** was in civilian clothes, the **MPs** were giving me the attention. I explained that the other two passengers were the Secretary of the Army and his wife. That took care of any concern for me!

Once at the hospital, I wanted to report the accident. Having worked in Legislative Liaison, I had some feeling for how this all worked, so I told the operator to get me the White House on the phone. She was kind of funny because she said, "We don't have a White House at Fort Benning." I said, "No, I want the one in Washington." After a brief gasp she did a fine job.

The phone was answered by Jack Marsh, who later became Secretary of the Army. This was President [Gerald] Ford's Administration, of course. I told Mr. Marsh about the accident and that I wanted to be sure he heard from me before it was on the television and on the radio. I reported we had two people killed and we had some serious injuries but it looked like the congressmen and the ladies would be all right. Congressman Bevill was in the hospital along with Congressman Flynt and Congressman Jones. Flowers was okay, as I recall. I retold Mr. Marsh that the secretary was all right and that Mrs. Callaway's back was bothering her. At any rate, I reported all this to Mr. Marsh and he thanked me.

Within five minutes, the phone rang. It was President Ford. I talked to him a moment, then put Secretary **Callaway** on.

We finally got to our lodgings near the dam late that evening. Having been assigned to Savannah District years before, I still knew many people who were there. They had had certain things planned for us that evening, which didn't occur, but we did have the dedication the next day. The secretary was quite sore, as most people were, but the dedication occurred as scheduled.

Personally, I did not have a bruise. The reason was simple. I was sitting in a swivel chair with its back toward the front of the bus. I was looking out the back of the bus, so to speak, and when the impact occurred that chair just swiveled so that all of the impact went right into the back of the chair, which was cushioned. Congressman Flowers, who was sitting across from me, came flying over the table toward me.

It was a bad experience that took a lot of zip out of us for a few days. Then we had the investigations because of the people involved.

General **LeTellier** finally submitted to a physical exam to learn, as I recall, that he did have a slight fracture of his shoulder. Cross was okay, Lord came out of it all right. The most serious passenger injury was the lady [Mrs. Nichols] whose foot was broken badly.

Early on after I became Deputy Chief, General Gribble asked me to go to Italy and Saudi Arabia, take a look at that situation, and see how we were handling it. Colonel Torrey Williams, Mediterranean Division engineer in Livomo, Italy, in preparation for our visit, developed his plan for managing the Saudi program. I was accompanied on that trip by Fred McNeely and Lee Garrett. I'd known Fred from my Goose Bay, Eastern Ocean District days and in Civil Works. He knew the military construction business from top to bottom. I had some earlier association with both Garrett and McNeely, but I really got to know them on this trip. They were truly outstanding assets to the Corps' team. The years to come proved their worth over and over.

Lee and Fred certainly had much more in-depth questions for Colonel Williams about how the plan was going to operate than I did, but I came to one conclusion during the outstanding briefing. Colonel Williams wasn't moving his headquarters to Riyadh fast enough. So on the way out to the car to leave, I congratulated Torrey on his great briefing. Also, I said I was going to recommend to the Chief of Engineers that the date of 1 July 1977 when Williams wanted to put the flag in Riyadh be moved to 1 July 1976, which was ten months hence and a full year sooner than he'd planned. I said, "Now, you will have an opportunity to rebut that to the Chief, but that's what I intend to recommend."

The logic for the position was important. While we managed earlier overseas programs successfully from the U.S., I felt we had to have this headquarters in Riyadh quickly. The reason was fundamental-we were to spend the Saudis' money, and we should have our head of operations as close as possible to the people putting up the money. It was just a question of time until they were going to want to know what happened to their money, and they'd object to going back to Italy to ask these questions. Besides, the work was in Saudi Arabia, and I wanted to have the headquarters in place before the workload developed into a really heavy management and control burden.

Williams was not too happy about a one-year curtailment of his plan, but it prevailed. Brigadier General [Richard] Wells became the first commander of the Middle East Division headquartered in Riyadh, Saudi Arabia.

Colonel [George] Gray was in Saudi Arabia as district engineer. He was a man you could put at the end of the line and not worry about getting the job done. He wasn't all that thrilled to have somebody move in on top of him.

My deputy tour was only one year. I had several articles prepared for *Water Spectrum*. One was called, "Our Troubled Waterways," as I recall [see Appendix A]. Then there was an interview about my civil works, what I saw for the future. There were some pretty interesting things in there, particularly on the wetlands, which in those days wasn't a headline item but which I had thought would become a major problem. We were still tidying up the 404

program. General Gribble was instrumental, as you may recall, in getting us to call the conference in New Orleans to come to grips with the matter.

Q: Would this be a good place to talk about Marco Island?

A: Yes. Marco Island became a major issue. I think the two projects that took the most time, as deputy, were Marco Island and, again, Lock and Dam 26. What happened at Marco Island? As I recall, there were several elements of the Marco Island Development plan-Areas A, B, C and D. Area A was developed. The developers needed a permit to start B and D, and to finish C. That's the concept, as I recall.

The district engineer had recommended the permit be issued. The division engineer recommended that it not be issued. The key element of the decision concerned the red mangrove-98 percent of the red mangroves in the United States are in the state of Florida. This particular tree is critical to the food chain for the shellfish in the Gulf of Mexico. The environmental community was very much concerned that Marco Island was going to destroy too much of the red mangroves. The governor of Florida wanted the permit issued, and that's normally a key factor. I think on that basis the district engineer said, "Okay," but the division engineer, for a variety of reasons, said, "No." One reason, I think, was that this matter was so important it should be decided in Washington. If the district engineer had turned the permit



MG John W. Morris was sworn in as Deputy Chief of Engineers on 1 August 1975 by First Lieutenant Yuvonne Balentine, the junior officer in OCE. Lieutenant Balentine wrote on the picture, "Congratulations, sir. Keep working at it and you may become Chief one day."

down, that would have been the end of it because his decision is irrevocable. The division engineer's position could be evaluated. General Gribble studied the matter and turned it over to me for a recommendation.

I took the file and spent the entire weekend with it. Finally, I recommended the Chief approve finishing Area C since most of the damage had been done and to disapprove the application for Areas B and D. My rationale was simple. By law, every state was required to have a coastal zone management plan. The state of Florida had not yet complied with that law. The governor of Florida had said that if this permit were issued, he would not allow any more destruction of the red mangrove. In the absence of a state law or a plan, there was no reason to think that the next governor would be bound by this governor's conclusions. So my rationale was that until the state of Florida had a coastal zone management plan, the federal government should exercise its position and deny the permit even though the governor wanted it to be issued. My belief was that a well-conceived coastal zone management plan would include necessary safeguards for red mangroves.

That decision created quite a stir when announced. It was a landmark decision, and it did have a lot to do with the coastal zone management plan program. You may recall that during my Civil Works times we made several landmark decisions on permits. I don't think we should try to cover them all-Bald Head Island, Block M, and a series of them. Marco Island was only one, but one of the more dynamic because of the money that was involved in building Marco Island and the political aspects.

General Gribble sustained the recommendation, and that's the way it came out as I can recall. I don't know what's happened since then.

- Q: Lock and Dam 26 came up again when you were deputy.
- As deputy, I was chairman of the Board of Engineers for Rivers and Harbors. It seemed that no matter where I went, Lock and Dam 26 followed along. Lock and Dam 26 arrived at the board for evaluation when I did. There were two key issues. One, of course, was the hullabaloo about a 12-foot channel. The design called for 12 feet of water over the sill to allow a tow to go in and out of the lock safely even though the river depth was for a 9-foot channel. The additional 3 feet caused the opponents to claim the Corps was going to make the river channel 12 feet deep and increase the tonnage. That was one part of the problem.

The project before the Board of Engineers for Rivers and Harbors included a 110 by 1,200-foot lock on the Illinois side near **Alton** and another 110 by 600-foot lock on the Missouri side. As you recall, the Corps did not have authority to build a structure which would increase the capacity of the waterway. Congressional authorization would be required.

The studies had shown that the projected traffic would require a second lock in years to come, but the current need required only the 1,200-foot lock. So technically speaking, we couldn't go for the second lock without having analyzed the impact of the extra traffic on the waterway. We knew that the 1,200-foot lock was okay because it wouldn't allow the traffic to be increased on the upper Mississippi beyond the old Lock and Dam 26 capacity.

So the problem was how to structure the language in the legislation that would accommodate the second lock without violating the NEPA, which required an environmental impact statement before authorization of a federally sponsored project.

As you recall, this Lock and Dam 26 project problem started while I was director of Civil Works. It didn't end until after I became deputy chief. I finally took the language problem home and drafted wording which was ultimately okayed by our counsel. It didn't authorize a second lock but allowed Congress to recognize that at some future date there might be a

need and if justified by the required **EIS** and other analyses, then it could be built without further authorization by the Congress. I don't recall the exact wording so I can't be too precise, but that was the thrust.

- Q: The review by the Board of Engineers for Rivers and Harbors was a very touchy subject too, wasn't it?
- A: Yes, and as indicated above, the problem became more sensitive when I was Chief. This entire Lock and Dam 26 subject might have been handled here as a separate topic, not piecemeal as part of the various positions that I filled.
- **Q:** What other duties did you have as deputy?
- A: Also as deputy, I represented the Chief frequently on command inspections and at staff meetings in the Pentagon. Every major element got a command inspection by one of the directors or the deputy. General Gribble used the deputy on those of particular interest to him. He sent me to Europe to look at EUD, which was relatively new as a division.

Frank **Koisch** was the engineer who precipitated the engineer command's becoming the Corps of Engineers Europe Division. When I first arrived as deputy, Major General Lou Prentiss was the division engineer. I spent a lot of time on this particular visit with the senior military people. General [Fritz] Kroesen had the VII Corps. He and I had been classmates at Carlisle. You may recall General Ken Cooper was the deputy CINC, USAREUR [U.S. Army, Europe].

Our principal concern was the condition of maintenance of military facilities in Europe. I'd visited General George Patton, Jr., commanding general of the 4th Armored Division. The tanks were in the mud, and the barracks were beat up. I'd been in Europe, of course, in 1949 to 1952—25 years earlier. The facilities really were no better-perhaps worse in 1975.

So I came back with a fairly bleak report on the facilities situation and the command's concern about it. Cooper advocated a strong new program to upgrade facilities in Europe. I had little to do with the program, but that trip helped General Gribble to support it.

- **Q:** What were your impressions of EUD as an organization?
- A: Let me think about that. I liked it. It was under some unique contracting and management constraints because of the way construction was handled in Germany. Also, a number of the staff had been in Europe since the war. Too many. So Lou and his successors, **LeTellier**, Donovan and [Norman] Delbridge, dealt with this problem and corrected it. Initially that was a concern.

The workload grew as the program to upgrade facilities was financed. When Delbridge arrived in 1977, he asked for and was given a couple of hundred more people. I was Chief and Graves was the deputy at the time. The Europe Division grew and became a very active division with a nice **workload** and numerous contracts. Morale was good. I happened to be in Frankfurt on Engineer Day one year, and they had a very well attended and enthusiastic evening celebration of that event. It was a good division with a large unique job. **EUD** had no districts.

- It had been established in 1974. Until then, USAREUR had taken care of its own construction, so it only had a couple of years under its belt **and** had to prove itself, I think.
- A: That's what happened. As mentioned, when I first visited Prentiss, he was really working hard to build the foundation for good U.S.-German contractor relationships. While in Europe, I visited every commander we served, Army and Air Force, just because of what you said. I

came back with a fairly comfortable feeling that the division would get the job done. I am sure history will give it good grades.

- What other initiatives did the Chief ask you to work on?
- A: Soon after I became deputy, General Gribble asked me to set up a command management program similar to the one I had installed in Civil Works. So the process was started, and that was fortunate because when I moved up to Chief, the year of preparation made it much easier to pursue my goals for the **Corps**.

General Gribble also established a philosophy of "customer satisfaction" and often brought up the subject to his principals when we would go to the various directorates for the weekly brief updates. Today we hear customer satisfaction all the time in the public arena. General Gribble was a forerunner of that particular concept and all the implications that go with it. General Gribble from 1973 to 1976 was a splendid Chief of Engineers. Some people felt his experience in the Corps was limited, but he had been district engineer in Alaska and division engineer in the North Central Division. Also, he was very intelligent, exceptionally good with people, andunderstood the Army and the Corps. I felt it was the Army's shortsightedness that they didn't give him command of the Army Materiel Command and a fourth star.

While I was director of Civil Works, he set up the Research and Development Directorate and put all the laboratories under the chief of Research and Development. I had to give up the Waterways Experiment Station and some others. I certainly didn't want to give up anything, especially the labs, but I must say the move was correct and has worked out fine.

Based on General Cooper's advice and help in 1974, General Gribble pushed hard to establish the Assistant Chief of Engineers' [ACE] position with an office in the Pentagon. Next, military housing and all related staff functions were consolidated under the new ACE. Bill Gribble was on target and put in place the capability for the Corps of Engineers to become the engineer for the Army in every way. OCE could handle the entire real property function from the cradle to grave. This became an objective which impacted on my decisions later as Chief of Engineers.

Having the ACE's shop allowed the Chief of Engineers to do the staff work for the Chief of Staff more responsively and more efficiently. General Cooper was the first Assistant Chief of Engineers. The whole idea made eminent sense, and the Army staff understood his plan.

- There had been a Directorate of Facilities Engineering for a while.
- A: General Gribble's idea also. The importance of facility maintenance to the Army warranted a separate staff element to manage this program. The Facilities Engineering Directorate removed the function from the Construction Directorate. Brigadier General Walt **Bachus** was the first and only director of Facilities Engineering. He started the "first annual facilities engineers conference" in Chicago. When I asked him about the title, he said, "We had to have the first annual so we can have the second annual."

Walter was a dynamic, enthusiastic, and effective director.

As deputy I began to realize there were many operational matters in OCE which should be done in the field. The headquarters people needed to spend their time making policy, getting decisions so the field could perform operations. So you'll find later that one of my first objectives was to get the Corps out of the operations business.

As we will cover later I expect, out of that came the Facilities Engineering Support Activity and the Water Resources Support Center, all at Belvoir.

General Gribble may not be a Chief who comes immediately to mind when you talk about Chiefs of Engineers. I don't know who does and who doesn't, but he did several things that were critical to the Corps as we now know it: The ACE, the Research and Development change, and the Directorate of Facilities Engineering. His "customer satisfaction" philosophy was a set piece as well.

He was an articulate gentleman. I only know one time when he seemed to be out of sorts, and that was-he just didn't want to go see the Assistant Secretary of the Army for Civil Works. I may have mentioned earlier that he felt that the director of Civil Works should be able to handle that office. Gribble was a man of few words and a clear thinker. When he didn't like the way the 404 program was going, it was very simple. He just called me up and indicated we had problems with the 404 situation and I'd better get it straightened out. That was about all he said. "It's not working right, I want you to get it straightened out."

- **Q:** Would you characterize him as being a little hesitant on the environmental program? Was it something that he was reluctant to see the Corps get involved in?
- A: I don't think so. He wasn't reluctant about straightening out the 404 program.
- Well, the Marco Island decision.
- A: The way he operated on the environmental things was to have the staff do its work first. There's no question about that. Maybe he felt that he needed to bring the staff in on these environmental types of things because it was new ground.
- O: But he backed up the decision.
- A: Always. Yes. No question about that.
- Q: In terms of his relationship with the ASAKW, did you ever hear him say anything that would indicate he feared that the ASAKW might become more involved in the day-to-day operations of the Corps?
- A: I would not be surprised if Fred Clarke didn't pass on to Bill Gribble his concern about the Assistant Secretary of the Army for Civil Works' position. Gribble believed, as I did, that the director of Civil Works should be the counterpart to the ASAKW and as such should keep the ASA/CW out of the other business of the Corps. Completely. This would save the Chief for the Secretary of the Army on civil works matters. It made a lot of sense to do it that way.

The Chief had the military program, the research and development program, facilities, and other matters besides civil works to worry about. So the principle was clear and it prevailed through my term. As Chief, I never dealt with the Assistant Secretary of the Army for Civil Works unless I absolutely had to. Gribble, to my knowledge, only dealt with the ASAKW twice in the whole time. So I think he probably realized that an erosion of that relationship would mean the Chief had to deal at a level where he shouldn't. If the Chief works at that level, he doesn't have the same flexibility in going to the Secretary of the Army and is distracted from his duties in supporting the Army.

There was no animosity between him and Secretary Veysey. That wasn't the problem. It was just the operating procedures, as he saw them. General Gribble was absolutely right on that.

Q: Was there a pattern to the duties that General Gribble gave you? Sometimes you see the "Mr. Inside, Mr. Outside" pattern, or was it more an issue at a time that he assigned to you? I mean, in terms of your working relationship with the Chief. Or maybe you weren't there long enough to really see a pattern.

- A: He gave me specific requirements. Also, I carved out certain areas to oversee on my own. I kept a lot of people busy, I know that. The secretaries up there wondered what I was up to. I chaired the Board of Engineers for Rivers and Harbors. Also, I led command inspections, plus getting the headquarters of the Saudi program moved and producing the command management program he wanted. I was fairly busy as a deputy. I probably was busier than people realized. As I say, I kept a lot of secretaries busy.
- One follow-up question on establishing the ACE's shop. Did that lead to any overlap with the Directorate of Military Programs? Did the spheres of the director of Military Programs in headquarters and the ACE's office have to be carefully worked out?
- A: Yes, they did and that'11 come up a little later. The ACE's shop traditionally puts together the program for the Chief of Staff to present to Congress. Consequently, the ACE had to work very closely with the director of Military Programs. For the normal staff things such as training, military equipment, and policy matters, the ACE didn't have to be concerned about the director of Military Programs.
- We haven't talked about Tenn-Tom.
- A: True, and we began to get rumors of cost problems when Danny Raymond was division engineer at the South Atlantic Division and later when he was deputy. He'd watched Tenn-Tom like a hawk and predicted it would become a real issue. He was right. During my term as deputy, the issue of the cost overrun of Tenn-Tom arose again, but not so much as it did later. General **LeTellier** succeeded Raymond at the South Atlantic Division. He briefed us on the cost growth and why it was happening. The environmental issue was very critical also at that time, and he mitigated as much of the environmental impact as possible. I went to Atlanta while I was deputy to get a detailed briefing on the progress and other various aspects that were beginning to evolve into major problems.
- Were there other important issues on the military side?
- A: I can't remember exactly when it happened, but Mr. Veysey added to his staff a position to overlook the entire Army's environmental program, but principally to overlook the Corps' environmental program. On our own initiative, I had the Strategic Studies Group, Don Weinert, take a cursory look at what the Army was doing about the environment and came to the conclusion that the military wasn't doing very much. I remember reporting to the Army staff that NEPA applied to the Army as well as it did to everyone else, and that we had to be mindful how we operated within our installations. CERL [Construction Engineering Research Laboratory] began immediately to work up an environmental assessment worksheet and program for the installation commander.

The Army's early attitude seemingly was that training was more important than the environment. That **mindset** had to be changed. The Corps was early on in trying to highlight this problem, this **mindset**.

We made a survey of the Army and found that we had a long way to go. At the same time, you may recall, there was a big program, big move on to save energy. Funds were appropriated for an energy survey and we managed to get money for an environmental survey also, which the commanders didn't like because they felt that it was money they otherwise would have had for some other purpose.

My recollection is that the Corps of Engineers assumed leadership in opening the subject of environmental attitudes within the Army family. It has taken a while, but now the Army is **onboard** everywhere because, as I said, the commanders in the field in the 1970s felt training and military preparedness were more important than the environmental constraints on post.

- Going back to what you just said, is it true to say that for installation commanders, both facilities engineering and this environmental plan were issues that were important to them, but they didn't particularly want to concentrate on them?
- A: I'd say the environment was something they thought was a lesser priority than training.

The reason the facilities engineer business kept popping up as a management problem was that most commanders wanted to control the post O&M money. If it wasn't for the fact that they wanted the money, it would have been a simple matter for the Chief of Engineers to become the facility engineer for the Army in an effective operational sense, not just in a staff sense. We never could and still haven't been able to get the installation commanders to release that money, relinquish the money.

The Corps can budget it, you know, and they put it in the program, but when it comes out, it's a post commanding general's to allocate. So they may have held hands off, you know, of the environmental needs.

- Q: Because one of the complaints is that they want results they can see right away or very soon.
- A: That's one of the reasons why, later on, we got into this one-stop shopping idea. To me it was just unreasonable that all the Corps' talent on the civil side of our house was not at least available on a reimbursable basis to help the posts. The one-stop shopping idea turned out to be a winner. The posts were getting immediate results. I mean, if they had a problem, if their staff couldn't handle it, the post commander or his representative could call up some district and get help. That started off as just a peanuts program. Now I think work worth hundreds of millions of dollars goes through that process.

It's improved the Corps' relationship within the Army, at least the Army's understanding. That's always been an educational problem, getting the Chief of Engineers' civil works mission to be part of the Chief of Staff of the Army's mission. I mean, those trails have not always even stayed parallel, much less converge. We'll come to that later, too, because we did a lot of work on that subject. I think some decent work.

- O: Maybe we could conclude today by getting your summary ideas about being deputy. As you pointed out, by the end of the time you were deputy, you knew that you were going to be Chief. That made it a little different, but how would you characterize the position of deputy and how you felt about the work there?
- A: The position of deputy is directly influenced by the personality of the Chief. In the case of General Gribble, he was perfectly happy for the deputy to oversee the civil works program as his alter ego, basically to manage the aspects of the regulatory issue, the dredging problems, and all the rest.

He did not have a vastly different attitude toward the military programs, but he seemed to be a little more involved in the military directly. As far as research and development was concerned, having been head of research and development for the Army, he was very close to that. So my work as deputy involved those things which either belonged to the deputy by some kind of a regulation, or the things the Chief would rather have him do. In my case, the deputy position provided a great opportunity to get back "up-to-speed" on other than civil works activities in OCE, the Corps, and the Army as a whole.

As an overall assessment of the job, being deputy for General Gribble for three years would have been fine. The only problem I would have had, if any, could be my own personality. I'm

not too good as number two. I probably would have been happier as director of Civil Works than I would have been as Deputy Chief of Engineers for a **three-year** term.

There was one other thing about the deputy's job. It carries with it a certain prestige, you know. You represent the Chief on the Army staff for many important subjects. As deputy you're recognized much more than you were, say, as the director of Military Programs or Civil Works.

- Q: Did you do any work up on Capitol Hill or did the director of Civil Works take care of that?
- A: **Yes.** I continued to have a lot of communication up there because I knew so many people, but I didn't interfere with the directors of Civil Works or Military Programs in their relations.

Chief of Engineers: Internal and External Relationships

- O: Let's begin the session today by discussing your selection for Chief.
- A: Of course, having been on the panel for selecting my successor, I can tell you that no one knows in advance who will get the job. Actually, I was out of the running when I became deputy in mid-1 975. The reason was simply arithmetic. A person could not assume that job unless he could finish four years by the time he was 59, and I would pass the 55 milestone before General Gribble finished his four-year term in 1977.

When General Gribble elected to retire a year early I became eligible. I didn't learn he was going to retire early until after the board to select a new Chief had been appointed. A neighbor at Fort **McNair** casually mentioned to my daughter that General Gribble was going to retire a little early, and she told me. I was surprised. Next day I asked Colonel Russ Lamp, executive to General Gribble, "What's this I hear about the Chief retiring a year early?"

He said, "Well, that's supposed to be close hold, but since you asked, he reported to the Chief of Staff he'd like to retire this summer."

So that event made me eligible; and it then became just a question of whether or not my record would be attractive to the board. The Chief of Engineers is selected by a system established by legislation. No less than three, no more than five officers of equal or higher grade to the position being filled would consider all colonels and higher in the Corps of Engineers. The chairman normally is a four-star general. The procedure normally produces the names in a sequence. The Chief of Staff and Secretary of the Army can rearrange the names, but they can't add any. Nor can the president, for that matter.

There is a story going around about General Pick. President Truman had received a list to replace General [Raymond] Wheeler, and he kept sending it back. The Army finally asked him what was wrong with the list, and the president supposedly said, "Well, if you'll send me a list with Lewis A. Pick's name on it, I'll keep it." That may or may not be true, but it makes a nice story.

In any event, I heard from a fairly good source that I was among those recommended. My experience fit the needs of the Chief's job, as I've tried to explain in these interviews. Whether or not my performance in those jobs would support selection from among the other excellent candidates with other assets and talents remained to be seen.

Finally, my recollection is that about the middle of May, General Gribble came in one morning and said, "I want you to know I'm going to retire the 30th of June and you've been nominated to take my position. Until it has been announced, you can't say anything about it." In reflecting on it, I don't know when General Gribble decided to retire, but I have a feeling it could have been as early as Christmas in 1975.

General Gribble was a very private person, particularly about his personal affairs. You couldn't have a better boss or advocate if he liked your performance.

As I have tried to explain to people, becoming Chief of Engineers, in part, is a matter of timing. When you walk down the hall, if the door's open, you have a chance to go in. If the door's closed, because of a lot of reasons, you just pass by and you have missed it. In my case I was definitely on the way past by, but the door opened all of a sudden and I was given a chance.

In 1976 Henry Bellmon of Oklahoma was in the U.S. Senate. He had been governor of Oklahoma when I was district engineer in Tulsa in the early 1960s. We'd stayed close to each other over the years because of a couple of projects of national interest which he supported. He was also very close to President Ford at the time. In late May 1976, he and I attended the dedication of Kaw Dam in Ponca City, Oklahoma.

Senator Bellmon learned that President Ford had nominated me to the Congress to be the 44th Chief of Engineers the morning of the day of the dedication. Much to my surprise and to everyone else's in the audience of about 15,000, 20,000 people, Senator Bellmon said he was happy to announce that the next Chief of Engineers was going to be General Morris. Of course, I'd been district engineer when the project was authorized and funded. Consequently, I was fairly well known to a lot of those people.

I had a wonderful time that day. As an honorary chief of the Ponca Indians from my Tulsa days, I was soon to become another chief-a bigger and different tribe, for sure. After a barbecue and other events that go with that kind of festivity, I went to Tulsa and stayed with some friends, and the celebration continued over the weekend. So it was a nice way to have it happen, especially since our son John, then First Lieutenant John W. Morris, III, was with me.

I don't know what else to say about getting the job. The great men and women of the Corps are loyal to their Chief and seemed to accept the news okay, but as Chief number 44, I knew that in the final analysis I had to earn their support by performance, not selection. The transition into the job was very easy. As deputy, I was sitting next to General Gribble and had worked with him closely ever since he'd become Chief three years earlier. One sidelight, shortly after my selection I was asked to move from Fort McNair into General Gribble's quarters at Fort Myer. My countersuggestion to redesignate my quarters at Fort McNair as the Chief's quarters was approved. General Clarke had lived at Fort McNair when he was Chief.

To become Chief of Engineers you go through a series of interviews. In my case I'd been interviewed by the Secretary of the Army [Martin] Hoffman, then by Secretary of Defense [Donald] Rumsfeld. Finally, I was called over to the Senate for confirmation hearings. Senator Stennis had me appear before the full Armed Services Committee for hearings on my becoming Chief of Engineers. I don't think that's happened with many other Chiefs, at least not anyone in my recent memory. That was quite a nice event. They were very kind to me.

On 1 July, General Weyard promoted me to lieutenant general, and Secretary Hoffman presented me with the appointment from the president to be Chief of Engineers. Gerry, the children, family, and friends were present for this very nice ceremony.

I think the most memorable event in conjunction with the change-over occurred when General Gribble gave me the "MacArthur Castles." As background, General [Leif] Sverdrup had been MacArthur's engineer in the Pacific during World War II. He was given this set of



Major General John W. Morris and his son, First Lieutenant John Morris, in Ponca City, Oklahoma, on the day in late May, 1976, when General Morris learned that he had been nominated to be the next Chief of Engineers.

castles by General MacArthur with the instructions that they should be given to some worthy engineer and not put in a museum someplace. So they were given to General Gribble while he was Chief. The leadership of the command changed when General Gribble pinned the MacArthur Castles on me. That transfer started a tradition-permanently, I hope.

I pretty much knew what I wanted to do as Chief of Engineers. I'd been in OCE by this time for four years and knew the staff and OCE operations. In addition, many years in the field in several districts and divisions meant that I didn't have to spend a lot of time learning how the Corps worked or what I needed to do. So I was able, within two weeks, to announce four goals that I wanted to achieve during my term. They were all interrelated.

Stay in Business. That meant getting the Corps in gear with the environmental program while remaining active in the traditional engineering field. I did not want the Corps to be pushed aside because of our historical achievements. This goal became much more significant later when President Carter was elected.

Support the Total Army. Total Army, meaning Active, National Guard, and the Reserves. That was important because the Army's program emphasized these elements. Furthermore, the Army didn't always understand the public works program and felt it diverted some of the engineer support that the Army needed. The best way